# Motorised Smoke & Heat Exhaust Dampers

# **VRFI-DES** mechanism



### DESCRIPTION

- The VRFI mechanism is perfectly upgradable: all the equipment can be assembled in its original mechanism box, either directly on delivery, or on site later thanks to adapted kits.
- It is installed using screws (supplied).

### **TRIPPING EQUIPMENT**

- CM: manual control mounted on all of the dampers. Red rotating lever integrated into the removable cover for manual tripping operations without having to remove the cover.
- FTE: thermal fuse reacting to temperature (70°C), does not require any energy for its tripping. The fuse is placed on a removable base support. It can be changed on its own.
- VDS or VM: working either by 24 or 48 V (DC) by power emission (VDS), or by power cut-off (VM).

### SIGNALLING EQUIPMENT

- FCU: single-pole closed position switch designed to send out information on the damper's position (damper closed) for example to the fire safety central unit.
- DCU: single-pole open position switch designed to send out information on the damper's position (damper open).
- FCB: bipolar closed position switch.
- DCB: bipolar open position switch.

#### VRFI MECHANISM KITS

Description	Code
Thermal fuse FTE 70° kit	11041750
Bag of 10 fuse links FTE 70°	11041753
Bag of 10 fuse links 70° VRFI09/00	11041121
VDS 24 VCC 3.5 W electromagnet kit	11041754
VDS 48 VCC 3.5 W electromagnet kit	11041755
VDS 24 VCC 3.5 W electromagnet kit	11041758
VDS 48 VCC 3.5 W electromagnet kit	11041759
FCU or DCU (VRFI) contact kit	11041762
FCU or DCU (VRFI) contact kit	11041763
FCB VRFI contact kit	11041764
DCB VRFI contact kit	11041765
B20S 24/480.7A VRFI motor kit	11041777

### **RESETTING EQUIPMENT**

- Manual resetting is possible on all VRFI fire dampers, the control lever just needs to be operated (after removing the cover).
- Reset motor enables placing of the fire damper back in the stand-by position after electrical tripping, without intervening on the tripping device, which is often difficult to access (simulations, periodic testing, etc.).
- Motor integrated into the original equipment box (3 screws).
- Details:
   Aximum current consumption: 700 mA.
- Voltage: 24/48V DC or AC.
- Time of the cycle: < 30s.

### **VRFI MECHANISM**

- ① Electromagnetic coil tripping device.
- 2 Signalling contacts.
- 3 Reset lever.
- 4 B20S reset motor.





#### Advantages

- Adaptibility since 1987!
- Easy to maintain.
- Proven and well recognised
- reliability.

# Motorised Smoke & Heat Exhaust Dampers

# VRFI-DES with sleeve, tunnel section, 2h fire resistance rating



### APPLICATION

Tunnel section smoke exhaust damper, fire resistance rating reserved for high rise buildings.
Suitable for installation in supended ceilings.

### DESCRIPTION

- Damper normally closed and opened in case of fireas controlled from the CMSI function controller.
- Rectangular duct element in Supalux. The sleeves are fixed to the extremities for connection to the ductwork.

### INSTALLATION

- New: connected to a PROMAT smoke extraction duct, offset from the vertical duct.
- Embedded into the wall.
- Traditional grouting with mortar.
- The mechanism can be offset from the wall (not grouted in).

### AVAILABLE OPTIONS **M5**

• Idem VRFI-DES 2h (ring casings) (see below).

### DIMENSIONS (mm)

• Minimum opening: X + 120 and Y + 120 - for Y > 500 Z = (Y- 500) / 2.

Compliance

reserved for high-rise buildings

Authorised for installation with

Approved for assembly into

Certified NF.

• 2h fire rating generally

offset mechanism.

banks.

and premises presenting special risks.

Advantages

• Validated for offset mounting on

• Traditional grouting with mortar.

• No smoke leakage, no heat transfer.

• Upgradable VRFI mechanism.

• Blade in refractory material.

a PROMAT duct.

suspended ceilings.

Suitable for installation in





## RANGE with a choice of options

Y	11041022 Width X - VRFI-DES 2h																
	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
200	•	•	•	•	•	•	•	•	•								
250	•	•	•	•	•	•	•	•	•	•	•	•					
300	•	•	٠	•		•	•	٠	٠	•	٠	•	•	•	٠		
350	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•
400	•	•	٠	•	•	•	•	٠	٠	•		•	•	•	•	•	•
450		•	•	•		•	•	•	•	•	•	•	•	•	•	•	•
500		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
550			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
600			•	٠	•	•	•	•	•	•	•	•	•	•	•	•	•
650				•	•	•	•	•	•	•	•	•	•	•	•	•	•

Parallel assembly

Υ	11041019 Width X - VRFI-DES 2h													
	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
700	•	•	•	•	•	•	•	•	•	•	•	•	•	•
750		•	•	•	•	•	•	•	•	•	•	•	•	•
800		•	•	•	•	•	•	•	•	•	•	•	•	•
850			•	•	•	•	•	•	•	•	•	•	•	•
900			٠	•	٠	•	•	•	•	•	•	•	•	•
950				•	٠	•	•	•	•	•	•	•	•	•
1000				•	٠	•	•	•	•	٠	•	•	•	•

### General Catalogue 2011 aldes